

REMARKS

Status

Claims 1-31 were originally filed. By the present amendment, claims 18-31 are canceled. Accordingly, it is claims 1-17 which are at issue.

The Office Action

In the Office Action mailed April 5, 2006, claims 1-17 and 22-31 were at issue. (Applicant notes for the record that on the cover sheet, PTOL-326, claims 1-17 and 22-30 were listed as pending. Applicant presumes that this is a typographical error since claim 31 was not subject to the restriction requirement, and is specifically addressed in the remaining portions of the Office Action.)

Specifically, claims 1-16, 22-28 and 30 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Published Patent Application 2002/0003004 of Guckert. In addition, claims 17, 29 and 31 were rejected under 35 U.S.C. §103 as being unpatentable over Guckert taken in view of U.S. Patent 5,485,870 of Kraik.

Applicant thanks the Examiner for the search, the Office Action, and for the thorough explanation of the basis of the rejections.

The Present Invention

Applicant will briefly recapitulate the principles of the presently claimed invention so as to aid in better differentiating the invention over the prior art of record. The invention defined in claims 1-17 which are presently pending, is directed to insulated structures which include a body of heat, vibration and/or noise absorbing refractory fabric exposed upon a surface thereof. The structures of the present invention may be configured for use in motor vehicles as fuel tanks, spare tire covers, cargo compartments, heat shields, ducts and the like. The structures of the present invention may also be

employed to fabricate tanks for the storage of water, chemicals and the like as well as for ducts or conduits for carrying communication cables, fluids and in other such applications.

The structures of the present invention all include a body of a polymeric material which defines a wall of the subject structure. This wall has opposed faces, and a body of refractory fabric is only partially embedded into the polymeric material of the wall so that the fabric is exposed upon one face of the wall. The fabric is not exposed on the other face of the wall. The claims at issue have been amended to more specifically and clearly recite the structural relationship of the polymeric material defining the wall and the refractory fabric.

The Rejection under 35 U.S.C. §102

In the Office Action, the Examiner rejected claims 1-16 as lacking novelty in view of the Guckert published patent application. The Guckert application is directed to a composite structure comprised of a plurality of layers of materials including resin-impregnated fabrics, metal foils, other woven materials, and the like which are configured to form generally tubular, ductlike structures. In the fabrication of the articles of Guckert, the layers of material are rolled into appropriate configurations and cured to harden the thermosetting resins. The resultant structure comprises a plurality of concentric layers of fabric, metal foil and polymer.

In the Office Action, the Examiner refers to the multilayered structure of Guckert and to the fact that the Guckert structure includes a fabric material embedded in a polymeric material. The Examiner cites to Figure 1 of Guckert which shows a cross section of the composite structure thereof; and in section 2, on page 2 of the Office Action, the Examiner asserts that the depicted structure does show a polymeric structure having a body of refractory fabric exposed upon a surface thereof. In this regard, the Examiner finds the rejected claims to be anticipated by the teaching of Guckert.

Applicant thanks the Examiner for this clear explanation of the rejection. Applicant concedes that the Examiner's position has merit insofar as a broad reading of Guckert could encompass the subject matter of the original claims. Applicant notes for the record that the Figure 1 drawing of Guckert does show a cross-sectional view of a material, and it is for this reason only that the fabric reinforcement of Guckert could be interpreted to be exposed "on the surface of the polymer;" and furthermore, there is no teaching at all in Guckert of any fabric being exposed on a surface of a polymeric material. As such, the overall teaching of Guckert is in actuality to a structure far different from that of the present invention. Nonetheless, in order to better differentiate the present invention over the prior art, Applicant has specifically amended the claims at issue to recite significant structural distinctions not shown or suggested in Guckert.

Specifically, independent claim 1 has been rewritten to make clear that the claimed insulated vessel has a body of polymeric material which defines at least a portion of a wall of the vessel. As now recited in the claim, the wall has opposed first and second surfaces, and the claim now specifies that the body of refractory fabric is partially embedded in the polymeric material of the wall so that the fabric is exposed on one of the surfaces of the wall and is not exposed on the other surface thereof. As such, this language makes clear that the polymeric material is exposed only on one of the surfaces of a wall defining the vessel. This is in contrast to the Figure 1 embodiment of Guckert wherein a fabric material is arguably exposed at an end portion of a cut tubelike structure. Furthermore, the fabric of Guckert is not exposed on a body defining a wall of the tube, and most specifically is not exposed on only one surface of the wall. As such, the subject matter of claim 1 and claims 2-16 dependent thereupon is novel and unobvious in view of the prior art.

The Rejections under 35 U.S.C. §103

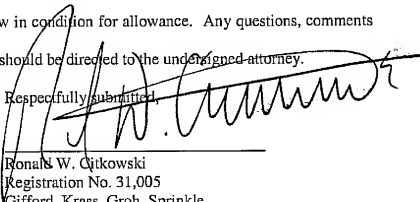
Claims 17, 29 and 31 were rejected under 35 U.S.C. §103 as being anticipated by the Guckert publication taken in view of U.S. Patent 5,485,870 of Kraik. Claims 22-31 have been canceled; accordingly, it is only claim 17 which is subject to this rejection.

In the Office Action, the Examiner holds that in view of the teaching of Kraik regarding the use of fiberglass reinforcement fabric in high-pressure tubing, it would be obvious to incorporate a composite layer of metal foil and glass fiber reinforcement into the structure of Guckert. Given Applicant's amendment and remarks as set forth above, Guckert is no longer relevant to the presently claimed invention. In view of the general inapplicability of this base reference, the rejection under 35 U.S.C. §103 is likewise overcome.

Conclusion

By the present amendment, Applicant has clearly differentiated the subject invention over all of the prior art of record. The application is now in condition for allowance. Any questions, comments or suggestions which the Examiner may have should be directed to the undersigned attorney.

Respectfully submitted,



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